ETHIOPIAN LEARNERS’ PERCEPTUAL DIFFICULTIES IN ENGLISH SEGMENTAL PHONEMES

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Though for a long time L2 teaching remained skeptical on its importance, pronunciation is now seen by most methodologists as it has equally important place relative to other language features.

With the advent of CLT, language pedagogy received a rise of claims in favour of teaching pronunciation for its role towards the learners’ “Linguistic, Affective, and Communicative” competencies (Stern, 1992).

The literature reflects deeper understanding of the role of pronunciation in spoken communication and hence to teach it effectively as a way of ensuring better communication (Jenkins, 2000; Celce-Murcia & Olshtain, 2000).
‘... the very act of pronouncing, not just the words we transmit, are essential part of what we communicate about ourselves as people’ (Morley, 1991:488; emphasis in original).

Much of the suggestions for research and pedagogy is intended to synthesize typical trouble spots of L2 pronunciation that learners might have (Kenworthy, 1981; Gimson, 1975; Jenkins, 2000).

Drawing on theoretical and practical evidences, scholars highlight the need for describing, identifying and evaluating learners’ pronunciation problems in learning and using the new sound system as a basic rationale for pedagogical decisions (content, focus and aim).
Previous researches tend to approach the ways learners may encounter pronunciation problems in either of the following dimensions: (Kenworthy, 1987; O’Connor, 1980; Italo, 1988; Chan, 2007; Moustofa, 1979; Jilg, 1999; Huang & Radant, 2009; Pennington and Richards, 1986).

- **Contrastive analysis statements** in highlighting the possible stumbling blocks that learners are likely to face because of their linguistic background.

- **Interlingual considerations** to take account of learners’ underlying phonological system in their actual use of the new pronunciation; and also to reveal the actuality and manifestations of (contrastive origin) problems and other problems that are of different origin.
The evidence is almost uniformly consistent in indicating that contrastive-based pronunciation problems vary across L1 groups and several other factors (Jenkins, 2004).

Also accompanied by its drawbacks: (Moustofa, 1979).

- Contrastive Analysis alone predicts some but not all problems
- All novel phonemes do not exert equal amount of difficulties; Neither do novel phonemes represent the entire problems L2 learners encounter.

An equally vigorous interest has emerged beyond L1-L2 phonemic differences to address various factors embedded in learners’ internalized phonological grammar, known as ‘interlanguage’ (Brown, 1997).
Why exploring Ethiopians’ perceptual problems in English segmental phonemes?

- Renewed interest for pronunciation and calls for ‘instructional equation’ (Morley, 1991)
  - staging pronunciation as an essential element of oral competence, for both listening & speaking.
- Factors influencing learning/using L2 pronunciation found to be varying with the particular L1 & a number of other social and contextual variables (Flege, 2002; Jenkins, 2004).
- Essential considerations for pedagogical suggestions on content, focus and attention (Levis, 2005):
  - pronunciation as a moving target: context-sensitive decisions (L1, interlocutors, learners’ needs)
  - ‘Socio-linguistically based, empirically researched syllabus’ (Derwing & Munro, 2005; Jenkins, 2002).
There are practical reasons as well:

- Scanty pedagogical status given for pronunciation and its teaching in Ethiopia (Anegagregn, 2007; Unpublished)
- Anecdotal observations of pronunciation problems on the part of students in comprehending English speech other than their fellow countrymen.
- Lack of adequate empirical information on the area: on Ethiopian learners’ pronunciation difficulties.
- The lack of adequate information on our learners’ pronunciation problems and intelligibility is regrettable because it is the sort of basic rationale the Ethiopian TEFL appears to be requiring for establishing more directed and supportive pronunciation teaching to Ethiopian learners.
Limiting itself to one language group in Ethiopia, the present study was intended to highlight typical trouble spots that Amharic L1 speaking learners experience in learning English pronunciation and in their actual use and interaction with native English speakers.

The objective of the present study is to closely examine Amharic native learners’ aural difficulties with English pronunciation, and verify and identify contrastive-origin segmental problems militating against actual speech perceptions.

It is hoped that the study adds to the local literature in the field; helps to improve pronunciation teaching in Ethiopian context provides considerations for further studies.
To gain a better appreciation for the successful learning of L2 phonology, one requirement is to consider the ability to discriminate utterances of one word type from those of another word type (e.g., bat from pat) (Jusczyk, 2008:229).

Adopting procedures used by previous speech perception tests, the study designed a test that asked the subjects to discriminate and recognize pairs of words that minimally contrast target phonemic and phonological features.
Participants of the study

- Sixty Amharic L1 speaking learners
  - All enrolled in regular undergraduate (I) programme.
- Based on self-reported personal info
  - All speak Amharic as L1
  - Had attended pre-university schooling in government schools
  - had no significant prior exposure to Native English Speakers
- The participants differed in
  - Sex (27 males, 33 females)
  - Age (Mean age 19)
  - Place of coming (AA, Amhara, Oromia, South regions)
  - Field of study (social work (12), pre-engineering (18), mathematics (18), psychiatry (17))
As a phonological difference between English and Amharic, the English and Amharic sound systems are very dissimilar and the two languages do not have many phonological features in common.

Given this variation, only features lacking in Amharic were included as the perceptual targets in this study: short vowels (æ, ʌ, ə, ɒ); long vowels (/iː/, /aː/, /ɔː/, /uː/ and /uː/); diphthongs (/ei/, /ai/, /ɔi/, /au/, /əu/, /ia/, /ea/ and /ua/); consonants (/θ/, ð/); consonant clusters (initial and final more than two).
Many researches on speech perception prepared the stimuli making their own recordings of native speakers or proficient non-natives while speaking or reading aloud speech materials containing target pronunciation features under investigation (Italo, 1988; Moustofa, 1979).

The present study adopted native speakers’ recordings already available in popular English pronunciation text books such as O’Connor (1980), Roach (1993) and Kelly (2000).
The stimuli was designed under two phases

- For each target pronunciation feature under investigation, the text versions of the speech extracts were first selected in the source books.
- They comprised sets of non-contextualized minimal pairs that contain target features contrasting them with other features (e.g. interdental fricative /ð/ with dental fricative /z/).
- Afterwards, using computer aided sound editing software, relevant speech extracts particularly exhibiting target pronunciation features were digitally selected from the original audio materials and saved as a separate file for further preparation of the test.
Speech Perception Tasks

- Forced word discrimination /Identification/ task was used to assess the ability of the subjects to discriminate or identify words from a pair of words differing or contrasting in only one phoneme.
- The assumption behind this kind of tasks is that accurate perception of a phonemic contrast is necessary for successful acquisition of non-native sounds (Brown, 1997).
- If the learner detects that two segments are used contrastively in the words, he/she has successfully acquired the new phonological representations.
Procedures

- **Stimulus presentation**
  - The subjects heard audio tapes played in a quiet room (pc-based audio player and USB multi media loud speaker)
  - Test papers distributed, instruction was explained also in Amharic

- To assess difficulties and to obtain the final inventory
  - Each response was coded for “correct” or “incorrect” answer

- Responses coded as “incorrect” include:
  - 1. responses that did not correspond to the target.
  - 2) if the item was skipped or no answer was given at all,
  - 3) if two or all options were marked rather than one.

- Target variables were graded and analyzed based on error scores under their category.
Results of the study
Overall Misperception Results

Mean percentage error scores

- Short vowels: 36%
- Long vowels: 48%
- Diphthongs: 34%
- Consonants: 51%
- Overall: 42%
In each of the minimal pair the subjects heard, one target vowel or consonant was contrasted with another one to separate the words.

The total test score shows that from the 42 minimal pair items that each of the 60 subjects heard, each participant on average failed to discriminate 18 of the minimal pairs (42%).

Besides, with only 10% of the students with scores above 70% correct, it does show that the majority of the learners had acute difficulty in discriminating English target sounds covered in the test.
Misperception results, contd...

- Overall misperception score (42%) ranging from 34% to 51% show variation on difficulty to discriminate novel sounds from non-novel ones.
- Variability results show significant differences (t-tests)
  - interdental consonants received the largest error score followed by long vowels (48%), short vowels (36.4%) and diphthongs (34.3%).
- The result has been consistent with previous researches such as Italo (1988) and Moustofa (1979) which exhibited that all non-existent English phonemes in the learners’ mother tongue do not exert the same degree of difficulty for the learners.
Misperception results, contd...

- Performance seems compounded with additional factors.

- Target position in word stimuli:
  - /ð-z/ word finally (60%) in ‘breathe/breeze’ than in any other position.

- Perceived similarity:
  - /au-ɔ:/ in ‘boat/bought’ (77%) than /au - ə:/ in ‘dirt/doubt’ (32%).
Misperception results, Contd...

<table>
<thead>
<tr>
<th>Target</th>
<th>stimuli</th>
<th>Mis. (%)</th>
<th>Target</th>
<th>Stimuli</th>
<th>Mis. (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>/au- ɔː/</td>
<td>boat/bought</td>
<td>77</td>
<td>/æ-ː/</td>
<td>mass/mess</td>
<td>33</td>
</tr>
<tr>
<td>/æ-ʌ/</td>
<td>fan/fun</td>
<td>72</td>
<td>/au- ɔː/</td>
<td>dour/door</td>
<td>30</td>
</tr>
<tr>
<td>/ə - ɔː/</td>
<td>caught/cot</td>
<td>60</td>
<td>/ua- ɔː/</td>
<td>dour/door</td>
<td>30</td>
</tr>
<tr>
<td>/ai – ei/</td>
<td>pie/pay</td>
<td>58</td>
<td>/ea-ia/</td>
<td>stare/steer</td>
<td>27</td>
</tr>
<tr>
<td>/u - uː/</td>
<td>suit/soot</td>
<td>56</td>
<td>/ə- □/</td>
<td>ahead/head</td>
<td>22</td>
</tr>
<tr>
<td>/ð-z/</td>
<td>close/clothe</td>
<td>52</td>
<td>/ai – aː/</td>
<td>pike/park</td>
<td>20</td>
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<tr>
<td>/θ-s/</td>
<td>sing/thing</td>
<td>49</td>
<td>/ia – iː/</td>
<td>feared/feed</td>
<td>20</td>
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<tr>
<td>/ei – e/</td>
<td>mate/met</td>
<td>38</td>
<td>/ʌ-ʌ/</td>
<td>dog/dug</td>
<td>20</td>
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<tr>
<td>/æ- aː/</td>
<td>lard/lad</td>
<td>37</td>
<td>/ɔi - ɔː/</td>
<td>coin/corn</td>
<td>18</td>
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<tr>
<td>/ɪ -iː/</td>
<td>been/bin</td>
<td>35</td>
<td>/ʌ - ɔː/</td>
<td>turn/ton</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>/p-u/</td>
<td>cod/could</td>
<td>13</td>
</tr>
</tbody>
</table>
Misperception results; Contd ...

- No significant difference b/n voiced /ð/ and voiceless /θ/ targets for consonant targets as against Eckerman’s Hypothesis.
- Position of targets in the words affected the result for consonants
  - Poor performance at word finally than word medially/initially.
- Learners’ confusion with novel vowels seems compounded with “perceived similarity” in the L1
  - /au- ɔ:/ than /au- ɔ:/; /ɔ - ɔ:/ than /ɔi - ɔ:/, /ɔ-u/
  - /æ-ʌ/ than /æ- æ:/, /æ- e/, /ɔ-ʌ/, /ʌ - ɔ:
  - /u - u:/ than /ɔ-u/
- Not only did vowels prove to be difficult but also
  - ↑ perceived similarity = ↓ performance success
Conclusion

- In this study it was found that target pronunciations of English which are lacking in the learners’ native language really continue to hinder the subjects’ listening comprehensibility.
- Meanwhile, the study has demonstrated that not all novel English pronunciation features caused equal amount of perception problems for the subjects.
- The data also exhibited different degree of difficulty for the subjects depending on whether the sound belongs to consonant, short vowel, long vowel or diphthong.
Conclusions, contd...

- All novel sounds did not present equal amount of perception difficulty
  - which varied as a function of ‘position’ for consonants and ‘phonetic x-c’ or ‘perceived similarity’ for vowels.
  - It seems very helpful if instruction focuses on these factors that could compound the learners’ perception constraints.
- The variation among individual learners both in total scores and subsection scores point to the fact that there is a room for improvement.
- Perhaps learners are not familiar with this pattern; lack of exposure.
- Learners might have failed to overcome L1 constraints after long years teaching in the classroom.
The learners’ perception results therefore shows the importance of giving due attention to such perceived similarity between English vowel contrasts in different arrangements during classroom instruction than mere focus on foreign vowels independently so that the learners would benefit in discriminating one from the other.

The results of this study confirm what had been hypothesized in interlanguage phonology, that all non-target phonemes do not exert equal amount of difficulty to the learners (Brown, 1997). For priority reasons, long vowels /ɔː:/ and /uː:/, diphthong /əʊ/, and consonants /ð/ and /ʃ/ fall into the top 5 most misperceived sounds and thus need to be given higher priority in teaching segmental sounds for Amharic native speaking learners.
Pedagogical Implications

- Raising awareness and readiness for the roles NL plays
  - Abilities and limitations of learners
- Generic pronunciation syllabus may not be a satisfactory approach for multilingual Ethiopia.
  - L1 based at lower levels; self study/supplementary at higher
- Balanced proficiency goal for perception and production
  - Prior teaching of recognition for improving production
- Systematic changes on size, content, and approach.
  - Some pronunciation topics should be more emphasized
- Diagnostic tests as an explicit intervention tool to direct attention to pronunciation problems that may not be noticed.
REFERENCE


THANK YOU SO MUCH!